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## Abandoned Ordnance in Libya: Threats to Civilians and Recommended Responses

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# Abandoned Ordnance in Libya: Threats to Civilians and Recommended Responses

In a report released in August 2012, “Explosive Situation: Qaddafi’s Abandoned Weapons and the Threat to Libya’s Civilians,” researchers from Harvard Law School’s International Human Rights Clinic (IHRC) examined Libya’s abandoned ordnance problem and its humanitarian consequences for the local population.<sup>1,2</sup> Based on field and desk research, the report documents the threats these weapons pose, analyzes steps to address them and offers recommendations to minimize civilian harm. IHRC co-published the report with the Center for Civilians in Conflict (formerly CIVIC) and the Center for American Progress. In this article, two of the report’s authors summarize its 2012 findings and recommendations.

by Bonnie Docherty and Anna Crowe [ Harvard Law School ]

**V**ast quantities of abandoned ordnance have littered Libya since the end of the 2011 armed conflict.<sup>3,4</sup> Munitions, ranging from bullets and mortars to torpedoes and surface-to-air missiles, have been scattered around inadequately guarded bunkers; local militias have gathered stockpiles in urban areas; and individual civilians have collected weapons for scrap metal or souvenirs. Determining the scale of the problem is difficult, as Moammar Gadhafi’s regime acquired an arsenal worth billions of U.S. dollars.<sup>2</sup> Moreover, the regime’s weapons were divided among dozens of ammunition storage areas, each containing 25–140 bunkers.<sup>5</sup>

Many experts express concern over the international proliferation of these weapons, but the abandoned ordnance has also posed serious domestic threats to civilians. The report “Explosive Situation: Qaddafi’s Abandoned Weapons and the Threat to Libya’s Civilians” documents these dangers and examines the key activities needed to minimize them: stockpile management, clearance, risk education and victim assistance. As a foundational step, the Libyan government should create a coordinated and comprehensive national plan eliminating the “government confusion” generated by competing agencies and facilitating the four areas of work.<sup>5</sup> In addition, the international community needs to provide ongoing and increased assistance and cooperation. The prevention of more civilian casualties requires urgent and immediate efforts by national and international entities.

## Threats to Libya’s Civilians

During its field mission to Libya, Harvard Law School’s International Human Rights Clinic (IHRC) documented five major threats that abandoned ordnance has posed to civilians.<sup>6</sup> Each of them has the potential to lead to additional civilian casualties.<sup>7</sup>

**Stockpile locations.** The positioning of stockpiles in populated areas coupled with poor management practices have increased the risk of catastrophic explosions that would cause significant injury and death. In March 2012 a member of the Military Council of Misrata, where this practice has been particularly common, estimated that in his city more than 200 militias each held between six and 40 shipping containers full of weapons.<sup>8</sup> In the same month, an explosion in Dafniya, a town 20 km (12 mi) from Misrata, exemplified the danger. A militia had stored weapons in 22 adjacent shipping containers, and a stray shot reportedly penetrated one of the containers, detonating the ammunition in a chain reaction and spreading explosive remnants of war (ERW) across the neighborhood. A mine from the blast later killed a DanChurchAid deminer, and in late March the community was again using buildings in the affected area.<sup>9,10</sup>

**Curiosity.** Inquisitiveness has further endangered civilians who visit contaminated sites or handle abandoned weapons. Children are particularly curious and unsuspecting, and they have often played with munitions. A Danish Demining



Weapons ranging from artillery shells to surface-to-air missiles spill out of an ammunition bunker near Zintan that was bombed by NATO in 2011. These unstable and inadequately secured weapons exemplify the danger posed to civilians by Moammar Gadhafi's abandoned ordnance months after the end of the armed conflict.

*Photo courtesy of Nicolette Boehland.*

Group manager observed that children “try to set off the anti-aircraft missiles with nails and bricks,” and IHRC learned of multiple casualties resulting from such behavior.<sup>11</sup>

**Harvesting weapons materials.** Civilians have been killed or injured while harvesting scrap metal to sell or explosives to use for fishing. For example, a man and his two sons died during an explosion in the Zintan ammunition storage area while gathering scrap metal in December 2011. The man's family later asked a MAG (Mines Advisory Group) deminer to clear piles of collected metal and propellant from the family's home.<sup>12</sup>

**Community clearance.** Since the conflict, abandoned and unexploded ordnance has contaminated homes, public buildings (such as schools and mosques) and farmland. Eager to make their communities safer, some civilians have tried clearing areas without expert training or assistance, an activity that endangers them and exacerbates the challenges of professional clearance.

**Displays of mementos.** Finally, war museums and private individuals have put weapons on display. The museum in Misrata, located on the city's main street, has exhibited a large collection of weapons in a relatively haphazard way. Demining organizations have worked to make such museums safe; however, the museums have undermined risk education efforts by normalizing the collection of weapons and subsequently encouraging private displays, which deminers cannot monitor.

## Stockpile Management

Since the end of the 2011 armed conflict, proper stockpile management has been sorely lacking in Libya, but good practices are essential to minimizing the threats of abandoned ordnance to the Libyan people.<sup>13,14</sup> International organizations and the national government's Libyan Mine Action Center (LMAC) have worked together to conduct surveys, and some local authorities have agreed to measures to improve practices.<sup>15,16,17</sup> Progress has been limited, however. Unstable and inadequately secured weapons have remained in bombed ammunition storage areas, temporary storage facilities and militia shipping containers.

Poor stockpile management practices have abounded. Max Dyck, the former U.N. Mine Action Service (UNMAS) program manager in Libya, reported in July 2012 that ammunition storage areas, littered with munitions that were kicked out of bunkers by NATO bombings, had no real security.<sup>5</sup> As a result, civilians have had access to the weapons. Furthermore, local militias have used dangerous storage methods, such as keeping different types of ammunition together and placing stockpiles within populated areas. A reluctance to give up weapons acquired during the armed conflict has interfered with U.N. and nongovernmental organization (NGO) efforts to improve management practices and destroy unstable weapons. In addition, funding for stockpile management initiatives has been insufficient, and coordination within the national government, between national and local government, and among the militias has been inadequate.

As a sovereign state, Libya bears the primary responsibility for dealing with its stockpiles. While it is engaged in a time of political transition and has many pressing concerns, Libya



Curious locals explore a tank yard in downtown Misrata where an Egyptian migrant was gathering scrap metal. Many civilians have been killed or injured while harvesting scrap metal or explosives from weapons.

*Photo courtesy of Bonnie Docherty.*



A visitor looks at the weapons on display at a war museum located on the main street in Misrata. Civilians may interpret such public displays of munitions to mean it is safe to bring weapons into their homes.

*Photo courtesy of Anna Crowe.*

should develop the national plan discussed above. In addition, it should take specific steps to reduce the humanitarian threats caused by poor stockpile management. For example, Libya should do the following:

- Allocate more resources to improving stockpile practices
- Increase physical security at ammunition storage areas
- Prioritize coordination with militias to move stockpiles out of populated areas
- Initiate a program for building technical expertise within Libya
- Request international assistance to help put these steps in place
- 

#### **Remedial Measures: Clearance, Risk Education and Victim Assistance**

To maximize civilian protection, a trio of remedial measures—clearance, risk education and victim assistance—should complement improvements in stockpile management. After the conflict, UNMAS and international NGOs took the lead on clearance efforts.<sup>18</sup> These groups, however, have not received support from the Libyan government, have not had enough explosives to undertake controlled demolitions, have had difficulty finding staff with technical expertise and sometimes have faced obstacles when accessing sites. Groups have also expressed concerns about the lack of local capacity to take over future clearance activities.

International NGOs have played a role in risk education and worked closely with local risk educators. They have held sessions raising awareness of the dangers of abandoned ordnance and other ERW, distributed brochures, set up regional ERW-information hotlines, placed billboards on streets and created radio messages.<sup>19,20</sup> Handicap International and MAG told the IHRC team that they have also cooperated with the Ministry of Education to train school teachers to provide risk education.<sup>21</sup> These NGOs have received some additional assistance from LMAC (part of the Army Chief of Staff's office) and the Libyan Civil Defense.<sup>17,22</sup>

Risk educators have faced several challenges, including dangerous attitudes toward weapons, particularly among children; difficulties in reaching influential audiences (especially women, who play a key role in educating their families about ERW risks); insufficient funding and the need to increase capacity in Libyan civil society to undertake further risk education activities.

As of July 2012, Libya had no established assistance program dedicated to the victims of abandoned weapons and other ERW. However, the broader assistance program for war victims, which is run through the Libyan Ministry of Health, has helped those harmed by ERW.<sup>23</sup>

Libya, as the affected country, bears primary responsibility for these remedial measures. In addition to developing a national plan, it should do the following:

- Increase its allocation of resources
- Promote capacity building and assist with the growth of local civil society
- Help deminers obtain explosives for ERW destruction and facilitate access to contaminated sites for clearance
- Ensure its victim assistance program follows international standards articulated in the Plan of Action on Victim Assistance under Protocol V on ERW to the *Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects*<sup>24</sup>

#### **International Cooperation and Assistance**

The four areas discussed previously—stockpile management, clearance, risk education and victim assistance—require significant resources and expertise, so international cooperation and assistance is critical to protecting civilians from the threat of these weapons.

As of July 2012, the international community had provided more than US\$20 million to address ERW in Libya, but




that assistance was decreasing while the threats to civilians remained.<sup>25,26,27</sup> To address the situation adequately, Libya needs increased and ongoing assistance.

During the conflict, NATO launched an estimated 440 airstrikes on ammunition bunkers. Rehabilitating a single bombed-out bunker can cost more than US\$1 million, not including security walls, fences and lights, or clearance of the ordnance scattered in the attack.<sup>5</sup> While financial contributions are valuable, assistance can also come in the form of material or technical support. As a result, all states, even those with a limited ability to give financial assistance, should be in a position to provide some kind of assistance.

NATO and its member states should accept special responsibility to provide cooperation and assistance to address the abandoned ordnance problem related to bombed ammunition bunkers. Although lawful, NATO airstrikes on the bunkers contributed to the ERW situation. NATO assistance would be consistent with the emerging principle of “making amends,” under which a warring party provides assistance to

civilians harmed in the course of lawful combat operations. Finally, such assistance would be consistent with the mandate under which NATO intervened in Libya’s armed conflict: the protection of civilians.

### Conclusion

Due to the scale of Libya’s abandoned ordnance situation, solving the problem is a monumental task. The weapons have already killed or injured civilians, and more casualties are almost guaranteed. Libya and the international community must therefore urgently develop a coordinated response seeking to minimize this humanitarian threat. As a member of Libyan civil society told IHRC, the country needs “more cooperation between all parties—all the way from NATO to the man who lives next to the abandoned ordnance.”<sup>28</sup> If successful, such coordinated action could not only reduce the loss of life in Libya, but also serve as a model for dealing with abandoned ordnance in other post-conflict situations. 

See endnotes page 64



A shipping container that was part of a militia's urban stockpile exploded in March 2012, setting off a chain reaction that littered a Dafniya neighborhood with weapons. The painted message at the site reads, “Don’t come closer—danger, death.”

Photo courtesy of Nicolette Boehland.



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Abandoned Ordnance in Libya: Threats to Civilians and Recommended Responses by Docherty and Crowe [ from page 4 ]

1. Explosive Situation: Qaddafi's Abandoned Weapons and the Threat to Libya's Civilians." *International Human Rights Clinic*, August 2012. <http://bit.ly/RXYQE8>. Accessed 16 January 2013.
2. The Associated Press Stylebook, which is the writing styleguide that *The Journal of ERW and Mine Action* follows, spells Libya's former leader's name as Moammar Gadhafi.
3. Keeley, Robert. "Urban Land Release in Libya: BAC and Land Release in Built-up Areas." *The Journal of ERW and Mine Action* 16.2 (Summer 2012). <http://bit.ly/Vvc6Mi>. Accessed 15 October 2012.
4. Forbes, Adam. "Small Arms/Light Weapons and Physical Security in Misrata, Libya." *The Journal of ERW and Mine Action* 16.2 (Summer 2012). <http://bit.ly/Vvcies>. Accessed 15 October 2012.
5. Max Dyck (program manager, U.N. Mine Action Service, Tripoli), telephone interview with IHRC, 3 July 2012.
6. The threats posed to civilians by abandoned ordnance often overlap with those posed by mines and unexploded ordnance (UXO).
7. While UNMAS recorded civilian casualties from ERW, this article does not include total civilian casualty figures because, as of August 2012, the available data was almost certainly incomplete due to the lack of local or central reporting mechanisms.
8. Colonel Mohammed Torgman (liaison with Joint Mine Action Coordination Team and member of the Military Council of Misrata), interview with IHRC, Misrata, 29 March 2012.
9. Chivers, C.J. "Death Illustrates Issues With Loose Weapons Stockpiles in Libya." *The New York Times*, 13 June 2012. <http://nyti.ms/TPJWyW>. Accessed 14 October 2012.
10. "In Remembrance: Kaido Keerdo, Estonian Demining Expert Killed in Libya." *The Journal of ERW and Mine Action* 16.2 (Summer 2012). <http://bit.ly/UsYO1I>. Accessed 14 October 2012.
11. Paul McCarthy (operations manager, Danish Demining Group), interview with IHRC, Sirte, 31 March 2012.
12. John McFarlane (technical field manager, Mines Advisory Group), interview with IHRC, Zintan ammunition storage area, 28 March 2012.
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14. Marek, Anne. "DTRA/SCC-WMD Is Minimizing the Risk of Catastrophic Accidents." *The Journal of ERW and Mine Action* 16.2 (Summer 2012). <http://bit.ly/TRigsL>. Accessed 14 October 2012.
15. UNMAS, for example, has been establishing relationships with local authorities and militias to facilitate the separation of items that are dangerous if stored together and the relocation of stockpiles to more remote locations. In Sabha, after a March 2012 meeting with UNMAS technical advisers, the civilian council agreed to assist the military council in storing ammunition in appropriate facilities. "Joint Mine Action Coordination Team-Libya Weekly Report 6 March, 2012." *JMACT*. 6 March 2012. <http://bit.ly/123omd2>. Accessed 22 July 2012.
16. "United Nations Mine Action Service." *The Journal of ERW and Mine Action* 16.2 (Summer 2012). <http://bit.ly/X1dWpg>. Accessed 14 October 2012.
17. Colonel Yousef Abdel Jawad, interview with IHRC. Tripoli, 11 July 2012.
18. The international mine action NGOs working in Libya in September 2012 included DanChurchAid, Danish Demining Group, Handicap International, Mines Advisory Group, the St. Barbara Foundation and the Swiss Foundation for Mine Action. UNMAS initially operated as a stand-alone agency, but by September 2012, it had become the Arms and Ammunition Advisory Section within the Security Sector Advisory Coordination Division of the U.N. Support Mission in Libya (UNSMIL). *JMACT*. 2 September 2012. <http://bit.ly/ZfYZGi>. Accessed 7 February 2013.
19. "Joint Mine Action Coordination Team-Libya Weekly Report, 2 July 2012." *JMACT*, 2 July 2012. <http://bit.ly/12GclrH>. Accessed 20 July 2012.
20. Alexandra Arango (community liaison manager, MAG), interview with IHRC, Misrata, 29 March 2012.
21. Teresa Tavares (risk education project manager, Handicap International), interview with IHRC, Misrata, 30 March 2012; Amira Zeidan (community liaison manager, MAG), interview with IHRC, Zintan, 28 March 2012.
22. Col. Nauri Saaid Gudrap, interview with IHRC. Tripoli, 13 July 2012.
23. Because the Ministry of Health program was not dedicated to ERW victims, a detailed analysis and evaluation of the program was outside the scope of the report.
24. "CCW Protocol V-Plan of Action on Victim Assistance." United Nations Office at Geneva (2006). <http://bit.ly/UxTdct>. Accessed 23 July 2012. While Libya is not a state party to Protocol V, it should nonetheless be guided by the Plan of Action as a matter of best practice.
25. Landmine and Cluster Munition Monitor Spreadsheet of International Assistance to Libya in 2011.
26. "Libya Emergencies for 2011." *UNOCHA Financial Tracking Service*. (10 December 2012): 11. <http://bit.ly/TRs9Xn>. Accessed 14 October 2012.
27. "Libya Emergencies for 2012." *UNOCHA Financial Tracking Service*, <http://bit.ly/Utpwah>. Accessed 14 October 2012.
28. Sabri Ebdawi (chief executive officer, Green Libya Petrol Services, and civil society member of the National Program), interview with IHRC, Tripoli, 10 July 2012.